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CLAIMS AS ORIGINALLY FILED WITH ENGLISH TRANSLATION

Claims

1. Coating mixture with anticorrosive properties, containing a polymeric organic binding agent, a low-molecular-weight fluid, radically polymerizable compound, a compound forming radicals by the action of actinic radiation, and a conductive pigment.
2. Mixture according to claim 1, characterized in that it is free of organic solvents and water.
3. Mixture according to claim 1 or 2, characterized in that the binding agent also contains polymerizable groups.
4. Mixture according to any one of claims 1 to 3, characterized in that the binding agent is chosen from the group consisting of condensation resins, epoxy resins, poly(meth)acrylates, polyurethanes, polyesters and polyethers, preferentially epoxidized novolacs, bisphenol-epichlorhydrin condensation products and esterification products of these resins or polymers with (meth)acrylic acid.
5. Mixture according to any one of claims 1 to 4, characterized in that the radically polymerizable compound is a mixture of compounds, at least a part of which contains more than one polymerizable group in the molecule or consists entirely thereof.
6. Mixture according to claim 5, characterized in that the radically polymerizable compound is an ester of an α -, β -unsaturated carboxylic acid, preferably acrylic or methacrylic acid, with a divalent or polyvalent monomeric or oligomeric alcohol.
7. Mixture according to claim 6, characterized in that the radically polymerizable compound is chosen from the group consisting of dipropylene- and tripropyleneglycoldi(meth)acrylate, 2-acetoacetyloxyethylmethacrylate, hexanedioldiacrylate, hydroxypropylmethacrylate, hydroxyethylmethacrylate and trimethylolpropanetriacrylate.
8. Mixture according to any one of claims 1 to 7, characterized in that the compound forming radicals under radiation is an aromatic keto compound.
9. Method for the application of a slippery anticorrosive coating to a metal substrate, characterized in that a mixture according to any one of claims 1 to 8 is applied to the surface of a metal substrate and the applied coating is irradiated for so long with actinic radiation of such an intensity that a solid, hard, tough, corrosion-resistant coating is formed.
10. Method according to claim 9, characterized in that the coating mixture is applied in a thickness of 2 to 8 μm , preferably 3 to 7 μm .

11. Method according to claim 9 or 10, characterized in that the substrate to be coated is a sheet steel which has previously been zinc coated and/or chromated or has been pre-treated chromate-free.
12. Method according to any one of claims 9 to 11, characterized in that the coating and hardening take place successively and continuously in one operation and the coating hardened by radiation is re-hardened thermally in some cases.
13. Flexible sheet metal which has been electrolytically zinc coated or hot galvanized and/or chromated or pretreated chromate-free, and has an organic coating applied thereto, which is obtainable by the method or any one of claims 9 to 12.